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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/699,940

Applicant(s)

SCOTT ET AL.

Examiner

JEAN D. SAINT CYR

Art Unit

2425

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-16, 18, 19, 24, 25, 27-29, 31-33, 35-38 and 40-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-16, 18, 19, 24, 25, 27-29, 31-33, 35-38 and 40-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/16/2009 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-10, 12-13, 15-16, 38, 40-42, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis et al in view of Dodson et al, US No.6184877 .

Re claim 1, Kikinis et al disclose displaying a currently displayed television program on a display (**see fig.3a**);

activating a navigation system during display of the currently displayed television program, the set of attributes comprising attributes which are each descriptive of a different aspect of the currently displayed television program, wherein each attribute of the set of viewer-selectable attributes corresponds to a combinable navigation context to generate a navigable sequence of television programs(**see fig.3a, where user**

activates Cheers; see fig.3b where a list of attributes is presented to the user; FIG. 3a further illustrates the EPG display 300 in which the viewer has marked one of the shows, in this case Cheers 301 broadcast on ABC at 8:00 pm, in preparation for actuating an expanded search function 305,col.3, lines 23-26);

selecting at least two attributes from the set of viewer-selectable attributes using one or more of three navigation keys comprising a previous key, a next key and a select key (see fig.3b; **a viewer action on the display as illustrated, e.g. clicking the desired show with an input device and displaying the clicked show as highlighted in contrast to other shows, or through a viewer action on a remote control device, col.3, lines 26-31);**

querying a database of television programming metadata for television program identifiers associated with the combined navigation contexts(see fig.4, **program data database; database search, where the probability of a match is determined according to the rules established by the search elements and parameters, col.4, lines 39-40);**

generating a sequence of television programs associated with the identifiers for navigation wherein sequence comprises a corresponding navigational axis, the sequence of television programs including the current television program and at least one other television program that shares one or more of the selected attributes with the currently displayed television program(see fig.3c; **the results include not only the two instances of shows having the "Cheers" show name 311 and 312, but also other shows with the actors from Cheers, namely the Frasier show with actor Kelsey Grammar 313, and the Becker show with actor Ted Danson 314,col.4, lines 6-10); and**

navigating the sequence of television programs, wherein the navigating comprises using the next key or previous key to change from displaying the currently displayed

television program in the sequence to displaying another program in the at -sequence, wherein the next key or previous key is used to cycle through the sequence of television programs without having to access a menu listing the television programs in the sequence for navigating to display of a next television program in the sequence(**control the selection of programs from the video input 430 for display on the video output 450, col.5, lines 53-54; clicking the desired show with an input device and displaying the clicked show, col.3, lines 29-30).**

But did not explicitly disclose wherein the navigation system determines and displays a set of viewer--selectable attributes for the currently displayed television program overlaid on the currently displayed television program;

logically combining the navigation contexts which correspond to the selected at least two attributes using Boolean operators.

However, Dodson et al disclose wherein the navigation system determines and displays a set of viewer--selectable attributes for the currently displayed television program overlaid on the currently displayed television program(see **fig.2 and fig.4; context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49);**

logically combining the navigation contexts which correspond to the selected at least two attributes using Boolean operators (**see fig.4; This query includes the final set of search terms which has been selected by the user; The final set may include some or all of the automatic search terms in addition to any additional search terms which the user may have selected, col.4, lines 30-34).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

Re claim 2, Kikinis et al explicitly disclose wherein the querying is performed by one or more predefined queries and each predefined query is associated with a combinable navigation context **(see fig.3b with option to combine to combine predefined queries)**

Re claim 3, Kikinis et al disclose wherein the set of attributes includes an actor attribute and a director attribute, and wherein logically combining the navigation contexts which correspond to the selected attributes comprises logically combining navigation contexts which correspond to the actor attribute and the director attribute to generate a single actor-director navigational axis**(see fig.3b; such as the name or show title 302, directors 303, actors 304, etc., as drawn from the descriptive part of the EPG program data, col.3, lines 40-42).**

Re claim 4, Kikinis et al disclose wherein links for launching the one or more predefined queries are associated with television program content **(see fig.3b).**

Re claim 5, Kikinis et al disclose wherein the television program content is included in a conventional broadcast television show **(see fig.3c).**

Re claim 8, Kikinis et al disclose wherein a link is selectable while the television program content is playing**(if a Steve Martin festival is playing, a viewer could search for other shows in which Steve Martin appears instead of only the specific show that forms the basis of the search reference, col.4, lines 21-24).**

Re claim 9, Kikinis et al disclose wherein links for launching the one or more predefined queries are associated with television program metadata (**see fig.3b, director, actor, genre**).

Re claim 10, Kikinis et al disclose wherein a link is selectable while the television program metadata is displayed (**see fig.3b where actor is selected**).

Re claim 12, , Kikinis et al disclose wherein the select key of the navigation controls selects one or more of the combinable navigation contexts(**see fig.3b; the search element actors 304 is selected,col.3, lines 65-66**).

Re claim 13, Kikinis et al disclose further comprising using at least one of the combinable navigation contexts as a logical filter (**see fig.3b where parameter actor is selected to force the processor to look for cheers and actor associated with only**).

Re claim 15, Kikinis et al disclose wherein the Boolean operators are applied automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program content associated with the link (**see fig.3c**).

Re claim 16, Kikinis et al disclose wherein the Boolean operators are applied automatically based on an association between a link for launching a predefined query corresponding to a navigation context and the television program metadata associated with the link(**see fig.3c where date and actor can be combined automatically**).

Re claim 38, Kikinis et al disclose a multi-axis television program system that comprises one or more computer readable media containing instructions that are executable by a computer to perform actions comprising: defining a television navigation axes-axis according to attributes of television programs where two-one or

more attributes define the navigational axis axes (**see fig.3b that contains axis of name, director, actor, genre**);

receiving a viewer selection of one or more attributes from among the displayed set of viewer-selectable attributes, wherein each attribute displayed is descriptive of a different aspect of a-the currently displayed television program(**see fig.3b, actor, director, genre**);

providing a database of television program identifiers and attributes descriptive of the television programs corresponding to the television program identifiers in -the database(see fig.4; **The EPG program data on the program data database 420 is comprised of show names or titles, and other descriptive information such as the actors, director, or genre, col.5, lines 34-37**);

providing a means for selecting and launching a database query based on the one or more selected attributes corresponding to the currently displayed television program, wherein the query returns a list of program identifiers of television programs having the one or more attributes that define the axis(**see fig.3c**); and

instructions to cycle through playing the television programs on the list when a user uses a navigation controller for changing television channels that, in turn, navigates along the navigational axis without having to access a menu listing the television programs in the list for navigating to a next television program in the list (**control the selection of programs from the video input 430 for display on the video output 450, col.5, lines 53-54**).

But did not explicitly disclose activating a navigation system during display of a currently displayed television program, wherein the navigation system automatically determines and displays a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the navigation

system overlays the set of viewer- selectable attributes on the currently displayed television program.

However, Dodson et al disclose activating a navigation system during display of a currently displayed television program, wherein the navigation system automatically determines and displays a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the navigation system overlays the set of viewer- selectable attributes on the currently displayed television program(**fig.4; context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49; The automatic search terms can be derived in various ways;col.3, lines 11-12).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

Re claim 40, is met as previously discussed with respect to claim 1.

Re claim 41, Kikinis et al disclose further comprising presenting on the television the navigational axis and at least some information for the television programs that correspond to the television program identifiers(**see fig.3b; upon selection by the viewer, the expanded search function 305 first moves or pastes into the EPG search display 310 the marked/selected show name Cheers 301 and its associated features, such as the name or show title 302, directors 303, actors 304,**

etc., as drawn from the descriptive part of the EPG program data, col.3, lines 37-42).

Re claim 42, Kikinis et al did not explicitly disclose further comprising during display of the different television program, activating the navigation system again, wherein the navigation system automatically determines and displays a different set of viewer-selectable attributes that are descriptive of the different television program, wherein the navigation system overlays the different set of viewer-selectable attributes on the display of the different television program, wherein one or more of the different attributes is selected to create a new list of television program identifiers corresponding to the selected one or more different attributes for creating an additional navigational axis, the additional navigational axis based on results from a different query based on the one or more different attributes.

However, Dodson et al disclose further comprising during display of the different television program, activating the navigation system again, wherein the navigation system automatically determines and displays a different set of viewer-selectable attributes that are descriptive of the different television program, wherein the navigation system overlays the different set of viewer-selectable attributes on the display of the different television program, wherein one or more of the different attributes is selected to create a new list of television program identifiers corresponding to the selected one or more different attributes for creating an additional navigational axis, the additional navigational axis based on results from a different query based on the one or more different attributes(**fig.4; context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49; The automatic search terms can be derived in various ways;col.3, lines 11-12).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

Re claim 44, is met as previously discussed with respect to claim 40.

Claims 6-7, 18-19, 24, 27-29, 31, 32, 33, 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis et al in view of Dodson in further view of Ellis et al, US No.20080115169 .

Re claim 6, Kikinis et al and Dodson did not disclose wherein the television program content is included in one of an on-demand television show or an on-demand television movie.

However, Ellis et al disclose wherein the television program content is included in one of an on-demand television show or an on-demand television movie on demand (**User selectable criteria may also include what program guide server 25 searches for such as, for example, program listings, program information, web sites, video-on-demand videos, software, or any other suitable program guide data, other information, or videos, 0078).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the system of Kikinis in view of Dodson in introducing on demand service, as taught by Ellis, for the purpose of allowing users to receive on demand contents from service provider according to their request.

Re claim 7, Kikinis et al did not explicitly disclose wherein the television program content is included in television musical programming.

However, Ellis et al disclose wherein the television program content is included in television musical programming (see **fig.19, MTV; music channel information, 0039**).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to introduce musical programming into the system of Kikinis, as taught by Ellis, for the purpose of allowing user to get access to music data or audio content.

Re claim 18, Kikinis et al disclose displaying a currently displayed television program on a display (**see fig.3a**);

activating a navigation system during display of the currently displayed television program, wherein the navigation system automatically determines and displays a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the navigation system overlays the set of viewer-selectable attributes on the currently displayed television program(**see fig.3a, where user activates Cheers; see fig.3b where a list of attributes is presented to the user; FIG. 3a further illustrates the EPG display 300 in which the viewer has marked one of the shows, in this case Cheers 301 broadcast on ABC at 8:00 pm, in preparation for actuating an expanded search function 305,col.3, lines 23-26**);

selecting one or more attribute values from the displayed set of viewer-selectable attributes to define a query for television programming metadata ,wherein the navigation system uses the selected one or more attribute values corresponding to the currently displayed television program in the query context from which the query was launched to produce a list of television program identifiers identified by the navigation system as corresponding to the selected one or more attribute values(**clicking the**

desired show with an input device and displaying the clicked show as highlighted in contrast to other shows, or through a viewer action on a remote control device, col.3, lines 26-31; see fig. 3b and 3c).

arranging the television programming metadata into a data structure wherein attribute values are associated with program identifiers(Like the search elements, the **additional search parameters may also be derived from the descriptive part of the EPG program data, col.3, lines 48-50);**

using the navigation control to access a different television program than the currently-displayed television program, the different television program accessed corresponding to the list (see fig.3b where user can select; upon selection by the viewer, the expanded search function 305 first moves or pastes into the EPG search display 310 the marked/selected show name Cheers 301 and its associated features, such as the name or show title 302, directors 303, actors 304, col.3, lines 40-42); and

displaying the different television program in response to the navigation control accessing the different television program (see fig.3c; the results include not only the two instances of shows having the "Cheers" show name 311 and 312, but also other shows with the actors from Cheers, namely the Frasier show with actor Kelsey Grammar 313, and the Becker show with actor Ted Danson 314, col.4, lines 6-10).

But did not explicitly disclose wherein the television program comprises a television program selected from a group consisting of on-demand television programs and currently broadcast television programs;

providing a user interface, wherein a navigation control -is used to launch the query by selecting the one or more attribute values from the displayed set of viewer-selectable attributes corresponding to the currently displayed television;

during display of the different television program, activating the navigation system, wherein the navigation system automatically determines and displays a different set of viewer-selectable attributes that are descriptive of the different television program, wherein the navigation system overlays the different set of viewer-selectable attributes on the display of the different television program, wherein one or more of the different attributes is selected to create a new list of television program identifiers corresponding to the selected one or more different attributes.

However, Dodson et al disclose providing a user interface, wherein a navigation control is used to launch the query by selecting the one or more attribute values from the displayed set of viewer-selectable attributes corresponding to the currently displayed television (see fig.4; The final set may include some or all of the automatic search terms in addition to any additional search terms which the user may have selected, col.4, lines 32-34).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

And Ellis et al disclose wherein the television program comprises a television program selected from a group consisting of on-demand television programs and currently broadcast television programs **(User selectable criteria may also include what program guide server 25 searches for such as, for example, program listings,**

program information, web sites, video-on-demand videos, software, or any other suitable program guide data, other information, or videos, 0078).

during display of the different television program, activating the navigation system, wherein the navigation system automatically determines and displays a different set of viewer-selectable attributes that are descriptive of the different television program, wherein the navigation system overlays the different set of viewer-selectable attributes on the display of the different television program, wherein one or more of the different attributes is selected to create a new list of television program identifiers corresponding to the selected one or more different attributes(**Program listings screens may be overlaid on a program being viewed by a user or overlaid on a portion of the program in a "browse" mode,0068).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in view of Dodson in introducing on-demand television program and navigation system overlays, as taught by Ellis, for the purpose of allowing users to get access to on demand contents and using sub-menu to display additional information on the screen.

Re claim 19, Kikinis et al disclose wherein the navigation control comprises a next key, a previous key and a select key, wherein the next key or previous key is used to cycle through the television programs corresponding to the list without having to access a menu listing the television programs in the list for navigating to a next television program in the list (**clicking the desired show with an input device and displaying the clicked show, col.3, lines 29-30).**

Re claim 24, Kikinis et al disclose further comprising displaying program information for each television program in response to the navigation control accessing the television program(**the viewer can then select from the results which of the shows to watch, col.4, lines 13-14).**

Re claim 27, Kikinis et al did not explicitly disclose further comprising selecting multiple attribute values, wherein the multiple attribute values combined in the query using Boolean logic operators, wherein the Boolean logic operators are applied automatic ally.

However, Dodson et al disclose further comprising selecting multiple attribute values, wherein the multiple attribute values combined in the query using Boolean logic operators, wherein the Boolean logic operators are applied automatic ally(**This query includes the final set of search terms which has been selected by the user; The final set may include some or all of the automatic search terms in addition to any additional search terms which the user may have selected,col.4, lines 30-34; The automatic search terms can be derived in various ways;col.3, lines 11-12).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in view of Ellis in introducing combining a plurality of search terms together automatically, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

Re claim 28, Kikinis et al disclose wherein the Boolean operators are designated by a context of the currently displayed television program (**see fig.3b, director, actor**)

Re claim 29, Kikinis et al disclose a multi-axis television navigation system, comprising: a server for storing and accessing digital television programming content (**see fig.4, database**);

a navigation control for navigating any one of multiple navigational axes to change from displaying of a currently displayed television program to displaying a television program provided by the server, and for selecting links to launch predefined queries, wherein each predefined query queries a database based on television program

attributes selected by a viewer and returns a navigation axis comprising a list of program identifiers of television programs corresponding to a value for the television program attributes selected **(control the selection of programs from the video input 430 for display on the video output 450, col.5, lines 53-54; user uses remote control to select parameter; see fig.3c);**

a means for storing television program metadata in a database **(The EPG program data on the program data database 420 is comprised of show names or titles, and other descriptive information such as the actors, director, or genre, col.5, lines 34-37);**

a means for arranging the program metadata in a relational schema **(The processor 410 in the described embodiment acts under program control by a program stored in program logic memory 440 to perform the previously described expanded search functions 305, col.5, lines 19-22);**

a means for defining and storing the pre-defined queries **(memory 440 to perform the previously described expanded search functions 305, col.5, lines 19-22);**

a means for embedding links to the pre-defined queries in logically associated metadata for a currently displayed television program **(the additional search parameters may also be derived from the descriptive part of the EPG program data, col.3, lines 48-50);** and

wherein the navigation system uses one or more selected attribute values selected from the set of viewer-selectable attributes corresponding to the currently displayed television program to define one of the predefined queries to produce the list of television program identifiers **(see fig.3c; the results include not only the two instances of shows having the "Cheers" show name 311 and 312, but also other**

shows with the actors from Cheers, namely the Frasier show with actor Kelsey Grammar 313, and the Becker show with actor Ted Danson 314,col.4, lines 6-10);

wherein the navigation controls provide for navigation from the currently displayed television program to a different television program corresponding to one of the program identifiers in the list by activation of a single key(see fig.3c; col.4, lines 6-10).

But did not explicitly disclose a means for logically combining multiple predefined queries using Boolean operators,

wherein the navigation system is configured to be activated during the display of the currently displayed television program, wherein the navigation system automatically determines and displays a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the navigation system overlays the set of viewer-selectable attributes on the currently displayed television program.

However, Dodson et al disclose wherein the navigation system is configured to be activated during the display of the currently displayed television program, wherein the navigation system automatically determines and displays a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the navigation system overlays the set of viewer-selectable attributes on the currently displayed television program(see fig.2 and fig.4; context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49; The automatic search terms can be derived in various ways;col.3, lines 11-12).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

And Ellis et al disclose a means for logically combining multiple predefined queries using Boolean operators **(The user may construct a Boolean expression by selecting criteria such as attribute types, attributes, logical operators, and sorting criteria, 0078)**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in view of Dodson in introducing Boolean operator and navigation system overlays, as taught by Ellis, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

Re claim 31, is met as previously discussed with respect to claim 19.

Re claim 32, Kikinis et al disclose wherein the relational schema adheres at least in part to a global listings format (see fig.3a).

Re claim 33, Kikinis et al disclose a television navigation engine, executing on a computing device, the engine comprising: a database for television program metadata**(The EPG program data on the program data database 420 is comprised of show names or titles, and other descriptive information such as the actors, director, or genre, col.5, lines 34-37);**

a query engine to find program identifiers in the database corresponding to predefined

queries, wherein a predefined query returns a navigational axis from the database, wherein a navigational axis is a list of program identifiers of television programs(see fig.4; processor; see fig.3c);

a user interface to associate launch of one or more of the predefined queries with selection of attributes descriptive of a currently displayed television program and to receive the attributes which are selected by a viewer(see fig.3b);

an axis cache to store the list of program identifiers returned by one or more predefined queries(The EPG program data on the program data database 420 is comprised of show names or titles, and other descriptive information such as the actors, director, or genre, col.5, lines 36-37); and

a navigation controller associated with the user interface to select the attribute values from the displayed set of attribute values corresponding to the currently displayed television program for launching the one or more predefined queries, to navigate a navigational axis that is a-the list of program identifiers of television programs determined to correspond to the one or more predefined queries, and to display television programs corresponding to the program identifiers on the list(control the selection of programs from the video input 430 for display on the video output 450, col.5, lines 53-54; a viewer action on the display as illustrated ,e.g. clicking the desired show with an input device and displaying the clicked show as highlighted in contrast to other shows, or through a viewer action on a remote control device, col.3, lines 26-31).

But did not explicitly disclose wherein activation of the user interface during display of a currently displayed television program results in the user interface presenting a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the user interface overlays the set of viewer-selectable attributes on the currently displayed television program for a viewer to select one or more attribute values from the displayed set of viewer-selectable attributes to

define a query;

However, Dodson et al disclose wherein activation of the user interface during display of a currently displayed television program results in the user interface presenting a set of viewer-selectable attributes that are descriptive of different aspects of the currently displayed television program, wherein the user interface overlays the set of viewer-selectable attributes on the currently displayed television program for a viewer to select one or more attribute values from the displayed set of viewer-selectable attributes to define a query (fig.4; **context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49; The automatic search terms can be derived in various ways;col.3, lines 11-12).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

And Ellis et al disclose select one or more attribute values from the displayed set of viewer-selectable attributes to define a query(**The user may construct a Boolean expression by selecting criteria such as attribute types, attributes, logical operators, and sorting criteria,0078)**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in view of Dodson in introducing

Boolean operator and navigation system overlays, as taught by Ellis, for the purpose of allowing users to do search containing plurality of attributes.

Re claim 35, is met as previously discussed with respect to claim 19.

Re claim 36, Kikinis et al disclose a multi-axis television program system that comprises a multi-axis database schema implemented by a processor executing instructions stored in computer readable storage media, the schema comprising: instructions for arranging a database of television programming metadata into indices facilitating predefined queries(**The processor 410 in the described embodiment acts under program control by a program stored in program logic memory 440 to perform the previously described expanded search functions 305, col.5, lines 18-22**);

wherein each attribute of the set corresponds to a combinable navigation context which can be used for generating a navigable sequence of television programs along a navigational axis, wherein the set of attributes corresponding to the currently displayed television program are automatically determined by the processor and displayed as viewer-selectable attributes when a user interface is activated during display of the currently displayed television program(**see fig.3b where there are director, actor, genre and user can select parameters with the remote control**);

wherein the predefined queries return a list of identifiers from the database corresponding with one or more of the attributes (**see fig.3c**),

wherein each list forms a navigational axis (**see fig.3b**),

wherein each identifier in a list corresponds to either an on-demand or currently broadcast television program (**see fig.3b, fig.3c**);

wherein the television programs on the list are displayed as accessed by a television channel navigation means for navigating one or more navigational axes, wherein the television channel navigation means comprises a next key, a previous key and a select key, wherein the next key or previous key is used to cycle through the television programs corresponding to the list without having to access a menu listing the television programs in the list for navigating to a next television program in the sequence(The viewer can then select from the results which of the shows to watch, col.4, lines 13-14; **clicking the desired show with an input device and displaying the clicked show, col.3, lines 29-30).**

But did not explicitly disclose wherein one or more links contextually associated with one or more attributes of a currently displayed television program call the predefined queries, wherein the one or more attributes -re selected by a viewer from among a set of attributes and logically combined using Boolean operators.

However, Dodson et al disclose wherein one or more links contextually associated with one or more attributes of a currently displayed television program call the predefined queries (**fig.4; context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49; The automatic search terms can be derived in various ways;col.3, lines 11-12).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the

purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

And Ellis et al disclose wherein the one or more attributes -re selected by a viewer from among a set of attributes and logically combined using Boolean operators(**The user may construct a Boolean expression by selecting criteria such as attribute types, attributes, logical operators, and sorting criteria,0078**)

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in view of Dodson in introducing Boolean operator and navigation system overlays, as taught by Ellis, for the purpose of allowing users to do search containing plurality of attributes.

Re claim 37, Kikinis et al disclose wherein the one or more attributes include one of: type of program, program title, alphabetical order of title, year of release, channel, time, first air date, episode order, episode name, genre, actors, writer, director, producer, rating, sound characteristics, video characteristics, language, subtitles, closeness of match to search criteria, and popularity(**The EPG program data on the program data database 420 is comprised of show names or titles, and other descriptive information such as the actors, director, or genre, col.5, lines 36-37**).

However, Dodson et al disclose further comprising- during display of the different television program, activating the navigation system again, wherein the navigation system automatically determines and displays a different set of viewer-selectable attributes that are descriptive of the different television program, wherein the navigation system overlays the different set of viewer-selectable attributes on the display of the different television program, wherein one or more of the different attributes is selected to create a new list of television program identifiers corresponding to the selected one or more different attributes for creating an additional navigational axis, the additional navigational axis based on results from a different query based on the one or more

different attributes(**fig.4; context-sensitive program information displayed on the TV display overlaid onto a program. Examples of context sensitive program information include current program title, the actors starring in the program, the start time, and the end time, col.2, lines 59-63; the user may select one of the hits to view the text associated with the hit, col.3, lines 48-49; The automatic search terms can be derived in various ways;col.3, lines 11-12).**

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in introducing displaying context-sensitive program information related to the currently display television program in overlay with the currently displayed television program, as taught by Dodson, for the purpose of allowing users to do search containing plurality of attributes and using sub-menu to display additional information on the screen.

Re claim 43, Kikinis et al disclose wherein a two-dimensional control feature allows for navigation along the navigation axis, the two-dimensional control feature comprising a next key, a previous key and a select key, wherein the next key or previous key is used to cycle through the television programs corresponding to the list without having to access a menu listing the television programs in the list for navigating to a next television program in the list(**clicking the desired show with an input device and displaying the clicked show, col.3, lines 29-30**).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis et al in view of Dodson further in view of Ellis and further in view of O'Connor et al, US No. 20030165324.

Re claim 25, Kikinis et al did not disclose further comprising: pausing a first television program at a pause point in response to the navigation control accessing a second television program on the list; and

resuming the first television program at the pause point in response to the navigation control accessing the first television program.

However, O'Connor et al disclose further comprising: pausing a first television program at a pause point in response to the navigation control accessing a second television program on the list(**While watching the season premiere of a television show, the viewer can literally "pause" the program,0104**);

resuming the first television program at the pause point in response to the navigation control accessing the first television program(**When the user wishes to resume to the prior program as indicated at diamond 2712, the restoration, implemented at block 2714, uses the stored switch time to identify a return point in the prior program. In this way, the user can watch one program in the same channel, switch to another program, return to the original program and, using the catch-up feature, may catch back up to real time, by knowing where the viewer left the prior program, 0123**).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to modify the invention of Kikinis in view of Dodson further in view of Ellis in introducing pausing television program and resuming television program, as taught by O'Connor, for the purpose of allowing users to switch from one channel to another one without missing any part of the previous selected program.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an

application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199(IN USA OR CANADA) or 571-272-1000.

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